# Release Notes

#### PD4 Information Model Version 1.2.0.0

### Build 4b - Development Release for Early Testing

Note that CCB-46 is not yet approved.

March 12, 2014

These notes detail the changes made to the PDS4 Information Model and contained in Release 1.2.0.0. These changes include those approved by the CCB since Version 1.1.0.0 and bug fixes since Version 1.1.0.1. The released documents include an XML Schema file, Schematron file, data dictionary, and an information model specification document.

#### CCB/MC approved changes made since the release of Version 1.1.0.0

- 1. CCB-46 New Products.
  - a. Add Product\_Native for InSight/SEIS SEED data format
  - b. Add Product Telemetry for MAVEN Telemetry.
- 2. CCB-30 Create a new Local\_Internal\_Reference class
- 3. CCB-41 (Part 2) Add three schematon rules for checking that both fields and groups are not zero in table record definitions <Record\_\*>
- 4. CCB-22 Adopt Rules for Case of Enumerated Values (Part 2) Telescope.coordinate\_source values, carriage return line feed, etc. (Part 1 done for V1.1.0.0) attribute\_concept and conceptual\_domain (Part 3 Resolved that no changes are necessary) Steward\_id
- 5. CCB-20 Correct Minor Errors in Enumerated Values
  - Instrument.type Deprecate "X-ray Fluorescence", "Thermal And Electrical Conductivity Probe", "Grinding And Drilling Tool".
  - Replace X-ray Defraction Spectrometer with X-ray Diffraction Spectrometer; Alpha Particle Xray SpectrometerwithAlpha with Particle X-Ray Spectrometer
    - Add "Grinding Tool" and "Drilling Tool" to the list of enumerated values with definitions
  - Replace Encoded\_Binary.encoding\_standard\_id "CCSDS Communications Protocols" with "CCSDS Space Communications Protocols"

- Replace Node.name#Navigation Ancillary Information Facility with Navigation and Ancillary Information Facility
- Replace PDS\_Affiliate.team\_name#Navigation Ancillary Information Facility with Navigation and Ancillary Information Facility
- 6. CCB-29 Deprecate Display\_2D\_Image class
- 7. Add Display Dictionary.
- CCB-50 Add Array\_3D\_Map, Array\_3D\_Spectral\_Map, Array\_3D\_Spectral\_Movie as subclasses
  of Array\_3D

## **Bug Fixes**

- Add "parent\_of" to replace "subclass\_of", "extension\_of" and "restriction\_of" in <DD Association> and <DD Association External>
- 2. Delete duplicate permissible value 'collection\_to\_associate' from pds:Product\_Collection.pds:Reference\_List.pds:Internal\_Reference.
- 3. Replace "pds.jpl.nasa.gov/pds4/schema/released/" with "pds.nasa.gov/pds4/" in the PDS4 label for the schema and schematron files.
- 4. Add schematron rule to check that the pds:File/pds:file\_size unit = 'byte'
- Restrict schematron rule pds:Target\_Identification/pds:Internal\_Reference to pds:Product\_Observational/pds:Observation\_Area/pds:Target\_Identification /pds:Internal\_Reference to eliminate conflict with similar associated with pds:Document.
- 6. remove dangling schematron rules for Discipline\_Facets, Group\_Facet1, and Group\_Facet2
- 7. replace the message "In Product\_Collection a description is required in Citation\_Information." with "In Product\_Bundle both Citation\_Information and its description are required." for the schematron rules associated with Product\_Bundle, Product\_Collection, Product\_Document, and Product\_Text\_File.
- 8. add the reference\_types investigation\_to\_instrument\_host, investigation\_to\_instrument, instrument\_host\_to\_instrument, target\_to\_instrument, target\_to\_instrument, target\_to\_investigation to pds:Product\_Context/pds:Reference\_List/pds:Internal\_Reference.
- 9. add schematron rule to validate that the names of the first and second axis of an Array\_2D\_Image must be set to Line and Sample.
- 10. add 'Product Native' to the test for Product Class.
- 11. deprecate 'carriage-return line-feed' from Checksum\_Manifest, Inventory, Transfer\_Manifest
- 12. remove extraneous blank from value of "restriction of" in DD Association/reference type
- 13. replaced 'CSSDS' with 'CCSDS' in Encoded Telemetry
- 14. replace 1 with 0 in "must be greater than 1" for validating number of characters in Citation Information.description